

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 21, 29 and 31 in accordance with the following:

1. (cancelled).
2. (previously presented) The file device as claimed in claim 29, wherein the storage control means attaches information indicating a preceding block and information indicating a size of data to be recorded in a block to the data recorded in the block and records same to the storage control means.
3. (previously presented) The file device as claimed in claim 29, wherein the storage control means updates the management information so that, when a data-unrecorded block occurs among the blocks allocated by the block allocation means when recording the file, the unrecorded block becomes an unused block.
4. (previously presented) The file device as claimed in claim 29, wherein:
the storage control means has storage sequence setting means for setting a storage sequence of data that makes up the file; and
the data that makes up the file being allocated among blocks to be recorded by the block allocation means based on the sequence set by the storage sequence setting means and recorded to the allocated blocks.

Claims 5-6 (cancelled).

7. (previously presented) The computer implemented data access method as claimed in claim 30, wherein said recording in the blocks with the file attaches to each block that records with the file, data indicating a preceding block and data indicating a size of data to be recorded therein.

8. (previously presented) The computer implemented data access method as claimed in claim 30, further comprising updating the management information so that when an unrecorded block occurs, among the blocks allocated when recording the file, the unrecorded block becomes an unused block.

9. (previously presented) The computer implemented data access method as claimed in claim 30, wherein said recording of the file allocates blocks that are to record data that makes up the file in said allocating based on previously-set storage sequence of the data that makes up the file and records the data to the allocated blocks.

Claims 10-11 (cancelled).

12. (previously presented) The computer file device as claimed in claim 31, wherein the storage controller attaches information, indicating a preceding block and information indicating a size of data to be recorded in a block, to the data recorded in the block and records the data with the attached information in the storage unit.

13. (previously presented) The computer file device as claimed in claim 31, wherein the storage controller updates the management information so that, when an unrecorded block of data in the file occurs among the blocks allocated by the block allocation unit when recording the file, the unrecorded block becomes an unused block.

14. (previously presented) The computer file device as claimed in claim 31,
wherein the storage controller includes a storage sequence setting unit setting a storage sequence of data that makes up the file; and
wherein the data that makes up the file is allocated among blocks to be recorded by the block allocation unit based on the sequence set by the storage sequence setting unit and recorded to the allocated blocks.

Claims 15-16 (cancelled).

17. (previously presented) The computerized file access method as claimed in claim 32, wherein said recording the file further comprises attaching, to each block that records the file, data indicating a preceding block and data indicating a size of data to be recorded therein.

18. (previously presented) The computerized file access method as claimed in claim 32, further comprising updating the management information so that when an unrecorded block occurs, among the allocated blocks when recording the file, the unrecorded block becomes an unused block.

19. (previously presented) The computerized file access method as claimed in claim 32, wherein said allocating of the blocks that are to record data that makes up the file is based on a previously-set storage sequence of the data that makes up the file.

20. (cancelled).

21. (currently amended) The ~~data accessing means~~ file device as claimed in claim 2, further comprising:

file accessing means accessing the blocks in sequential order according to the management information to read the file and, when either the information indicating the preceding block does not indicate the preceding block in the file or the information indicating a size of data recorded in the one or more blocks is not within an actual block size range, for stopping reading of the file and for updating the management information so that succeeding blocks become unused blocks.

22. (previously presented) The data accessing method as in claim 7, further comprising: accessing the blocks in sequential order according to the management information to read the file; and

when either the information indicating the preceding block does not indicate the preceding block in the file or the information indicating a size of data recorded in the one or more blocks is not within an actual block size range, stopping the reading of the file and updating the management information so that succeeding blocks become unused blocks.

23. (previously presented) The file device as claimed in claim 31, further comprising: a file accessing unit accessing the blocks in sequential order according to the management information to read the file and, when either the information indicating the preceding block does not indicate the preceding block in the file or the information indicating a size of data recorded in the one or more blocks is not within an actual block size range, stopping the reading of

the file and updating the management information so that succeeding blocks become unused blocks.

24. (previously presented) The computerized file access method as in claim 17, further comprising:

accessing the blocks in sequential order according to the management information to read the file; and

when either the information indicating the preceding block does not indicate the preceding block in the file or the information indicating a size of data recorded in the one or more blocks is not within an actual block size range, stopping the reading and updating the management information so that succeeding blocks become unused blocks.

25. (previously presented) At least one computer-readable medium storing instructions to control accessing data in a storage divided into blocks, comprising:

allocating blocks to record a file;
producing management information indicating the blocks that have been allocated; and
recording in the blocks with the file, the management information and sequence information indicating a sequence in which the file was recorded in the blocks.

26. (previously presented) The at least one computer-readable medium as claimed in claim 25, wherein said recording of the sequence information includes recording an identifier of a preceding block in each block after an initial block.

27. (previously presented) The at least one computer-readable medium as claimed in claim 26, wherein said recording further includes recording in each block, size information indicating an amount of data recorded therein.

28. (previously presented) The at least one computer-readable medium as claimed in claim 27, further comprising confirming the preceding block and the size of the data recorded in the block to identify valid data even when a disparity exists between the management information and the data recorded in at least one block, when reading out a file.

29. (currently amended) A file device for recording a file to-a an external storage divided into blocks, comprising:

block allocation means for allocating blocks in the external storage device to record a file accessed by said file device;

management information means for producing management information indicating the blocks that have been allocated; and

storage control means for recording in the blocks in the external storage device with the file, after the management information and sequence information indicating a sequence in which the file is to be ~~was~~ recorded in the blocks.

30. (previously presented) A computer implemented data access method for accessing a storage divided into blocks, comprising:

allocating blocks to record a file accessed by a computer;

producing management information indicating the blocks that have been allocated; and

recording in the blocks with the file, the management information and sequence information indicating a sequence in which the file was recorded in the blocks.

31. (currently amended) A computer file device for accessing data in a ~~a~~ an external storage divided into blocks, comprising:

a block allocation unit allocating blocks in the external storage device to record a file accessed by said computer file device;

a management information unit producing management information indicating the blocks that have been allocated; and

a storage controller recording in the blocks with the file, the management information and sequence information indicating a sequence in which the file was recorded in the blocks.

32. (previously presented) A computerized file access method to control accessing data in a storage divided into blocks, comprising:

allocating blocks to record a file accessed by a computer;

producing management information indicating the blocks that have been allocated; and

recording in the blocks with the file, the management information and sequence information indicating a sequence in which the file was recorded in the blocks.